



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

RBT18635
Job Sheet 175511



SHIP
57

Part No: RBT18635

Job Qty: 5 ea

Part Name: Tail Rotor Blade Bushing Removal Tool



Part Weight: 0 lbs

Status: Scheduled

Priority: Medium

Job Created: 4/6/18

Job Tracking No:

Due Date: 5/4/18

Created By: Marie Lajeunesse

Type: SOLD

Description:

Note: DWG RBT18635 Rev 2A IPP Rev A 18.04.06 new issue DP Verify DD

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup hrs	Run Hrs	Workcenter / Supplier	Lead Time	
90	Start up Operation	5 Ea		5/3/18	0.00	0.00	Start Up Small Fab-4		MLC
100	Small Fab	5 pcs		5/4/18	0.00	0.50	Small Fab-9		MLC DAS
110	QC	5 pcs		5/4/18	0.00	0.00	QC5		38
130	Packaging	5 pcs		5/4/18	0.00	0.00	Packaging3-2		GA145 18-05-31
140	QC21-FG	5 Ea		5/4/18	0.00	0.00	QC21		DAS MAY 3 1 018

Part Op 100 - 1-Assemble -5 into -7 using Loctite 680 on bottom threads as per DWG. M 138837 EXP: 11/19
Descriptions: 2-Bag and tag
130 - Identify and Stock

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
145 RBT18635-1	Adapter Bushing	5 Ea (1 ea)	90-Start up Operation	5070958
146 RBT18635-11 RKG 2	Receiver	5 Ea (1 ea)	90-Start up Operation	5070805
148 RBT18635-3	Spud	5 Ea (1 ea)	90-Start up Operation	5070813
AA 145 RBT18635-5	Rod	5 Ea (1 ea)	90-Start up Operation	5070807
RBT18635-7	Handle	5 Ea (1 ea)	90-Start up Operation	5070811
GA RBT18635-9	Spud	5 Ea (1 ea)	90-Start up Operation	5070809

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
90-Start up Operation	RBT18635-1	5	0	0
	RBT18635-11	5	0	0
	RBT18635-3	5	0	0
	RBT18635-5	5	0	0
	RBT18635-7	5	0	0
	RBT18635-9	5	0	0

Part Specifications

Specifications could not be found.

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

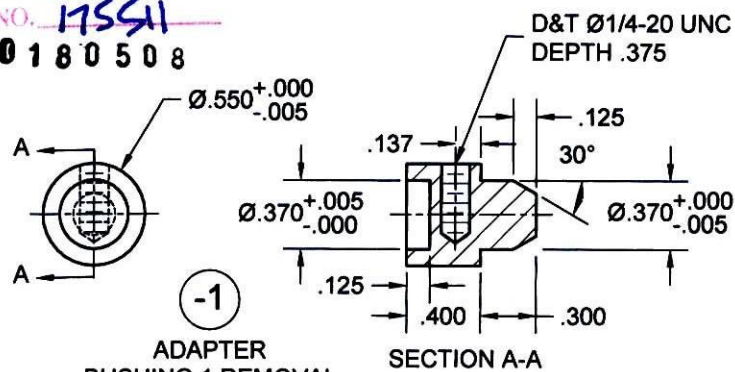
Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS <table style="width:100%; border: none;"> <tr> <td style="border: none;">Skid-tube ☐</td> <td style="border: none;">Cross tube ☐</td> <td style="border: none;">Water Jet ☐</td> <td style="border: none;">Engineering ☐</td> </tr> <tr> <td style="border: none;">Machining ☐</td> <td style="border: none;">Small Fab ☐</td> <td style="border: none;">Prod. Eng. Coord. ☐</td> <td style="border: none;">Quality ☐</td> </tr> <tr> <td style="border: none;">Thermoforming ☐</td> <td style="border: none;">Finishing ☐</td> <td style="border: none;">Rec/Store/Packaging ☐</td> <td style="border: none;">Other ☐</td> </tr> <tr> <td style="border: none;">Large Fab ☐</td> <td style="border: none;">Composite ☐</td> <td style="border: none;">Supplier ☐</td> <td></td> </tr> </table>				Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐	Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐	Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐	Large Fab ☐	Composite ☐	Supplier ☐																																																						
Skid-tube ☐	Cross tube ☐	Water Jet ☐	Engineering ☐																																																																							
Machining ☐	Small Fab ☐	Prod. Eng. Coord. ☐	Quality ☐																																																																							
Thermoforming ☐	Finishing ☐	Rec/Store/Packaging ☐	Other ☐																																																																							
Large Fab ☐	Composite ☐	Supplier ☐																																																																								
Date : _____	Step #: _____	QTY Effective : _____	MRB (QSI042) Approval _____																																																																							
Description Work Order De																																																																										
DART Aerospace Ltd. 1270 Aberdeen Street Hawkebury, ON R6A 1K7 CANADA TEL: 1 813 632-6200 Email: sales@dartaero.com www.dartaerospace.com Container No: S076841 Part: RBT18635 Job No: 175511 Serial No/Batch: S076841 Revision: 2A Inspector: _____ Exp Date: 05/31/2018 Instructions: _____ Date: 05/31/18				Completed By _____ Lead hand / Supervisor Approval Verification _____ QC / QA Coordinator Approval _____																																																																						
<table style="width:100%; border: none;"> <tr> <td colspan="2" style="text-align: center;">Root Cause</td> <td></td> <td></td> <td></td> </tr> <tr> <td style="width:15%;">Environment ☐</td> <td style="width:15%;">No Re-verification ☐</td> <td style="width:15%;">Press ☐</td> <td style="width:15%;"></td> <td style="width:15%;"></td> </tr> <tr> <td>Design ☐</td> <td>Operator ☐</td> <td>Bend ☐</td> <td></td> <td></td> </tr> <tr> <td>Doc/Data ☐</td> <td>Offset/Setup ☐</td> <td>Centr ☐</td> <td></td> <td></td> </tr> <tr> <td>Equip/Tooling ☐</td> <td>Supplier ☐</td> <td>Cracks ☐</td> <td></td> <td></td> </tr> <tr> <td>Handling/Pre ☐</td> <td>Training ☐</td> <td>Crimp ☐</td> <td></td> <td></td> </tr> <tr> <td>Material ☐</td> <td>Use for Testing ☐</td> <td>Cuffs ☐</td> <td></td> <td></td> </tr> <tr> <td>Internal Transport ☐</td> <td>Poor Information ☐</td> <td>Crushing ☐</td> <td></td> <td></td> </tr> <tr> <td>Tribal Knowledge ☐</td> <td>Rushing ☐</td> <td>Heat Treat ☐</td> <td></td> <td></td> </tr> <tr> <td>LOA ☐</td> <td>Product Improvement ☐</td> <td>Wave/Twist in Tube ☐</td> <td></td> <td></td> </tr> <tr> <td>Substation ☐</td> <td>Process Improvement ☐</td> <td>Marks/Chatter ☐</td> <td></td> <td></td> </tr> <tr> <td>Past Expiry Date ☐</td> <td>Manufacturing Process ☐</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Misidentified ☐</td> <td>Past Due ☐</td> <td></td> <td></td> <td></td> </tr> <tr> <td colspan="2"></td> <td colspan="3" style="text-align: center;">OTHER : _____</td> </tr> </table>					Root Cause					Environment ☐	No Re-verification ☐	Press ☐			Design ☐	Operator ☐	Bend ☐			Doc/Data ☐	Offset/Setup ☐	Centr ☐			Equip/Tooling ☐	Supplier ☐	Cracks ☐			Handling/Pre ☐	Training ☐	Crimp ☐			Material ☐	Use for Testing ☐	Cuffs ☐			Internal Transport ☐	Poor Information ☐	Crushing ☐			Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐			LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐			Substation ☐	Process Improvement ☐	Marks/Chatter ☐			Past Expiry Date ☐	Manufacturing Process ☐				Misidentified ☐	Past Due ☐						OTHER : _____		
Root Cause																																																																										
Environment ☐	No Re-verification ☐	Press ☐																																																																								
Design ☐	Operator ☐	Bend ☐																																																																								
Doc/Data ☐	Offset/Setup ☐	Centr ☐																																																																								
Equip/Tooling ☐	Supplier ☐	Cracks ☐																																																																								
Handling/Pre ☐	Training ☐	Crimp ☐																																																																								
Material ☐	Use for Testing ☐	Cuffs ☐																																																																								
Internal Transport ☐	Poor Information ☐	Crushing ☐																																																																								
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐																																																																								
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐																																																																								
Substation ☐	Process Improvement ☐	Marks/Chatter ☐																																																																								
Past Expiry Date ☐	Manufacturing Process ☐																																																																									
Misidentified ☐	Past Due ☐																																																																									
		OTHER : _____																																																																								

SHOP COPY
RETURN TO
ENTERING

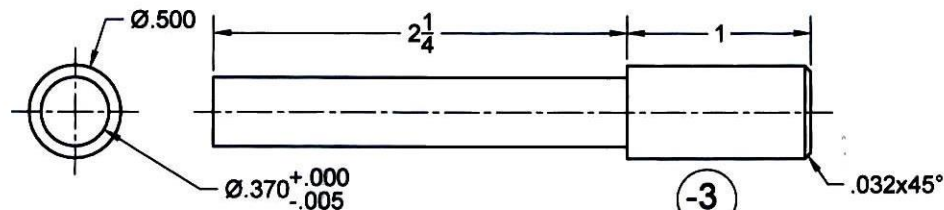
ROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. 17541

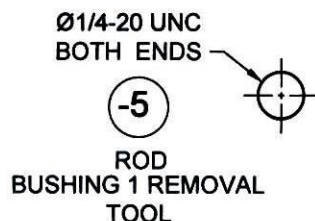
20180508



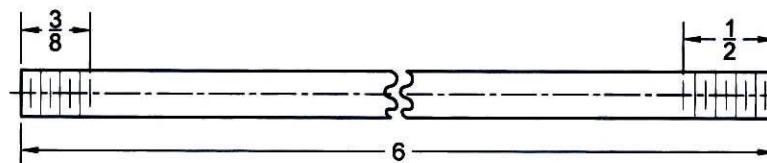
-1
ADAPTER
BUSHING 1 REMOVAL
TOOL



-3
SPUD
BUSHING 1 REMOVAL
TOOL



-5
ROD
BUSHING 1 REMOVAL
TOOL



THIS SIDE INTO -7.
USE LOCKTITE 680 ON
BOTTOM THREADS.

REVISIONS			
REV	DESCRIPTION	DATE	INITIAL / APPROVED
1	ADDED .125 x 30° TO -1 ADAPTER.	1/15/07	
2	CHANGED -11 R.063 TO CHAMFER & -7 MAT. FROM 1018.	1/13/07	
2A	CH'D TITLEBLOCK & REVISION BLOCK, CH'D REVISIONS FROM ALPHABETICAL TO NUMERICAL, CH'D ENGRAVE NOTE -7 & -11.	1/21/10	RJC RW

ASSY QTY	ASSY QTY	B/O	PART #	QTY	DESCRIPTION	MATERIAL	B/O INFORMATION OR SPECIFICATIONS	Pg.
			-1	1	ADAPTER BUSHING 1 REMOVAL TOOL	STRESS PROOF	Ø9/16 x 3/4	1
			-3	1	SPUD BUSHING 1 REMOVAL TOOL	STRESS PROOF	Ø1/2 x 3-3/8	1
			-5	1	ROD BUSHING 1 REMOVAL TOOL	1018	Ø1/4 x 6-1/8	1
			-7	1	HANDLE BUSHING 1 REMOVAL TOOL	STRESS PROOF	Ø3/4 x 3-1/8	2
			-9	1	SPUD BUSHING 2 REMOVAL TOOL	STRESS PROOF	Ø9/16 x 3-1/8	2
			-11	1	BUSHING RECEIVER	6061	Ø1-1/4 x 3-1/8	2

RED BARN MACHINE			
TITLE T/R BLADE BUSHING REMOVAL TOOL			
DWG NO. RBT18635			REV 2A
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES		DRAWN BY: PERRITT	
TOLERANCES ON:		APPROVED: <i>P. Perritt</i>	
DECIMALS .XXX ± .005		TREAT	
XX ± .01		FINISH	
X ± .1		SPEC	
FRACTIONS ± 1/32		BLACK OXIDE	
ANGLES ± 5°		USED ON MODEL	
UNLESS OTHERWISE SPECIFIED 1. BREAK ALL SHARP EDGES .015 x 45° PR .015 R		MD 369D	
2. DIMENSIONAL LIMITS APPLY AFTER PLATING		MD 369E	
SCALE	NTS	DATE	11-16-06
		SHEET	1 of 2